1. Nutr Cancer. 1993;19(3):281-302.

Preparation and production of a cancer chemopreventive agent, Bowman-Birk inhibitor concentrate.

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We describe our studies to produce an extract of soybeans with anticarcinogenic activity that we believe will be useful as a human cancer chemopreventive agent for several different organs. The anticarcinogenic activity of the extract is thought to be due to chymotrypsin inhibitor activity, which is due to the Bowman-Birk protease inhibitor (BBI) present in the extract, termed BBI concentrate (BBIC). We describe the contents of BBIC, the ability of BBIC to inhibit malignant transformation in vitro in terms of its chymotrypsin inhibitor activity, and the results of long-term toxicity studies in which mice and rats were exposed to high levels of BBIC for long periods of time.

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